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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BHATIA, AJAY M

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/823,431

Applicant(s)

MCCARTY ET AL.

Examiner

Ajay M Bhatia

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/31/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2143

1. Claims 1-54 are rejected.

Specification

2. The attempt to incorporate subject matter into this application by reference to Attorney Docket No. WMA-00-003 is improper because it does not provide the application number and/or the patent number.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 7-8, 10, 17, 22, 24, 26-34, 36-37, 41-43, 45-46, and 49-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Cossins et al. (U.S. Patent 6,343,290) (for the rest of the office action referred to as Cossins).
5. For claim 1, Cossins teaches, a method of utilizing a geographical information system, the method comprising:
receiving input address information; (see Cossins, Col. 15 lines 61-63)
geocoding the input address information; (see Cossins, Col. 16 lines 5-7)
and outputting positional information in response to the geocoding step. (see Cossins, Col. 16 lines 8-31)

6. For claim 2, Cossins teaches, the method according to claim 1, further comprising retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

7. For claim 3, Cossins teaches, the method according to claim 2, further comprising receiving selection criteria corresponding to the requested information, wherein the retrieving step is further based upon the selection criteria. (see Cossins, Col. 15 lines 56-61)

8. For claim 7, Cossins teaches, the method according to claim 2, further comprising:

selectively generating a map graphic based upon the positional information; and transmitting the map graphic and the requested information to a client station based upon the selectively generating step. (see Cossins, Col. 16 lines 15-31)

9. For claim 8, Cossins teaches, the method according to claim 7, wherein the selectively generating step comprises: interfacing a map database to retrieve mapping data corresponding to the positional information; and rendering the map graphic based upon the mapping data. (see Cossins, Col. 16 lines 15-31)

Art Unit: 2143

10. For claim 10, Cossins teaches, the method according to claim 2, wherein the requested information comprises at least one of wire center data, rate center data, PSAP (Public Safety Answering Point) data, CAP (Competitive Access Provider) data, switch collocation data, and switch location data. (see Cossins, Col. 4 lines 43-51 and lines 61-67)

11. For claim 11, Cossins teaches, the method according to claim 2, further comprising: displaying the requested information on a client station. (see Cossins, Col. 16 lines 46-48)

12. For claim 12, Cossins teaches, the method according to claim 7, further comprising: supporting a graphical user interface (GUI) that is on a client station, the GUI providing zoom capability of the map graphic by performing at least one of (1) drawing a rectangle on the map graphic with a cursor and (2) positioning a cursor along a zoom bar. (see Cossins, figure 8, 10, and 38)

13. For claim 13, Cossins teaches, the method according to claim 12, wherein a zoom distance is concurrently displayed corresponding to a position of the cursor. (see Cossins, figure 8, 10, and 38)

Art Unit: 2143

14. For claim 14, Cossins teaches, the method according to claim 1, wherein the positional information in the outputting step comprises latitude/longitude information.

(see Cossins, Col. 16 lines 5-7)

15. For claim 17, Cossins teaches, a geographic information system comprising:
an application server configured to receive requested information including input address information; (see Cossins, Col. 15 lines 61-63)

a database server communicating with the application server, wherein the database server is configured to geocode the input address information; and (see Cossins, Col. 16 lines 3-7)

a data source coupled to the database server, wherein the database server is configured to retrieve the requested information based upon geocoded input address.
(see Cossins, Col. 16 lines 8-31)

16. For claim 24, Cossins teaches, the system according to claim 19, wherein the application server comprises:

a map database containing mapping data; and

a mapping module configured to interface with the map database to retrieve the mapping data corresponding to the positional information and to generate the map graphic. (see Cossins, Col. 16 lines 8-31)

Art Unit: 2143

17. For claim 26, Cossins teaches, the system according to claim 17, wherein the requested information comprises at least one of wire center data, rate center data, PSAP (Public Safety Answering Point) data, CAP (Competitive Access Provider) data, switch collocation data, and switch location data. (see Cossins, Col. 4 lines 43-51 and lines 61-67)

18. For claim 27, Cossins teaches, the system according to claim 19, wherein the application server supports a graphical user interface (GUI) on a client station, the GUI providing zoom capability of the map graphic by at least one of (1) drawing a rectangle on the map graphic with a cursor and (2) positioning the cursor along a zoom bar. (see Cossins, figure 8, 10, and 38)

19. For claim 28, Cossins teaches, the system according to claim 27, wherein a zoom distance being concurrently displayed corresponding to a position of the cursor. (see Cossins, figure 8, 10, and 38)

20. For claim 29, Cossins teaches, the system according to claim 19, wherein the application server supports a graphical user interface (GUI) on a client station, the GUI providing a movable map legend associated with the map graphic. (see Cossins, figure 16 it is inherent from the drawing that the legend is movable, since the legend is displayed in its own window)

21. For claim 31, Cossins teaches, the system according to claim 17, wherein the application server and the database server communicates using TCP/IP (Transmission Control Protocol/Internet Protocol). (see Cossins, Col. 18 lines 30-35)

22. For claim 32, Cossins teaches, the system according to claim 17, wherein the positional information comprises latitude/longitude information. (see Cossins, Col. 16 lines 5-7)

23. For claim 33, Cossins teaches, a computer-readable medium carrying a sequences of instructions for utilizing a geographical information system, the sequences of instructions including instructions which, when executed by a processor, cause the processor to perform the steps of:

receiving input address information; (see Cossins, Col. 15 lines 61-63)
geocoding the input address information to generate positional information; and (see Cossins, Col. 16 lines 5-7)
retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

24. For claim 34, Cossins teaches, the computer-readable medium according to claim 33, wherein the processor further performs the steps of:
outputting positional information in response to the geocoding step; and (see Cossins, Col. 16 lines 8-31)

Art Unit: 2143

receiving selection criteria corresponding to the requested information, wherein the retrieving step is further based upon the selection criteria. (see Cossins, Col. 15 lines 61-63)

25. For claim 36, Cossins teaches, the computer-readable medium according to claim 33, wherein the processor further performs the steps of:

selectively generating a map graphic based upon the positional information; and transmitting the map graphic and the requested information to a client station based upon the selectively generating step. (see Cossins, Col. 16 lines 15-31)

26. For claim 37, Cossins teaches, the computer-readable medium according to claim 36, wherein the selectively generating step comprises:

interfacing a map database to retrieve mapping data corresponding to the positional information; and

rendering the map graphic based upon the mapping data. (see Cossins, Col. 16 lines 8-31)

27. For claim 41, Cossins teaches, the computer-readable medium according to claim 33, wherein the requested information comprises at least one of wire center data, rate center data, PSAP (Public Safety Answering Point) data, CAP (Competitive Access Provider) data, switch collocation data, and switch location data. (see Cossins, Col. 4 lines 43-51 and lines 61-67)

28. For claim 42, Cossins teaches, the computer-readable medium according to claim 33, wherein the positional information comprises latitude/longitude information.
(see Cossins, Col. 16 lines 5-7)

29. For claim 43, Cossins teaches, a method of determining service availability using a geographical information system, the method comprising:
providing address information and a selection criterion; (see Cossins, Col. 15 lines 61-63)
retrieving requested information based upon the address information and the selection criterion, the retrieving step comprising,
geocoding the address information, and (see Cossins, Col. 16 lines 5-7)
outputting positional information. (see Cossins, Col. 16 lines 8-31)

30. For claim 45, Cossins teaches, the method according to claim 43, further comprising selectively generating a map graphic based upon the positional information.
(see Cossins, Col. 16 lines 8-31)

31. For claim 46, Cossins teaches, the method according to claim 45, wherein the selectively generating step comprises: interfacing a map database to retrieve mapping data corresponding to the positional information; and

rendering the map graphic based upon the mapping data. (see Cossins, Col. 16 lines 8-31)

32. For claim 49, Cossins teaches, the method according to claim 43, wherein the requested information comprises at least one of wire center data, rate center data, PSAP (Public Safety Answering Point) data, CAP (Competitive Access Provider) data, switch collocation data, and switch location data. (see Cossins, Col. 4 lines 43-51 and lines 61-67)

33. For claim 50, Cossins teaches, the method according to claim 43, wherein the positional information in the outputting step comprises latitude/longitude information. (see Cossins, Col. 16 lines 5-7)

34. For claim 51, Cossins teaches, the method according to claim 43, wherein the providing step comprises initiating a telephone call to a customer service representative (CSR). (see Cossins, Col. 4 lines 52-56)

35. For claim 52, Cossins teaches, the method according to claim 43, wherein the providing step comprises interfacing with the geographical information system using a web browser. (see Cossins, Col. 15 lines 56-63)

36. For claim 53, Cossins teaches, a memory for storing spatial data and requested information, comprising a data structure including:

an address table for storing input address information, the input address information being geocoded to generate positional information, the address table comprising a positional information field for storing the generated positional information; and (see Cossins, Col. 8 lines 16-43)

an information table for storing the requested information, the requested information being retrieved based upon the generated positional information. (see Cossins, Col. 16 lines 15-31, it is inherent that a list is the same as a table)

37. For claim 54, Cossins teaches, the memory according to claim 53, wherein the information table comprises at least one of:

a CAP building table for storing vendor code data and capability data;

a PSAP (Public Safety Answering Point) table for storing PSAP spatial geometry data, agency data, and directory number information;

an exchange information table for storing wire center data, OCN (Operating Company Number) data, and exchange spatial geometry data;

a collocation information table for storing collocation switch data and switch capability data;

a switch information table for storing switch CLLI (Common Language Location Identification) code data, and LEC (Local Exchange Carrier) identification data;

Art Unit: 2143

a rate center table for storing rate center name data, and rate center spatial geometry data; and

a customer information table for storing customer name data, directory number data, revenue data, address data, and customer positional information.

(see Cossins, Col. 4 lines 43-51 and lines 61-67)

Claim Rejections - 35 USC § 103

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

39. Claims 4,5, 6, 18, 19, 21, 23, 25, 35, 39, 40, 44, 47, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cossins (U.S. Patent 6,343,290) in combination with Esposito (US. Patent 6,101,496).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 2143

40. For claims 4,5,and 6, Cossins teaches, a method of utilizing a geographical information system, the method comprising:

receiving input address information; (see Cossins, Col. 15 lines 61-63)

geocoding the input address information; (see Cossins, Col. 16 lines 5-7)

and outputting positional information in response to the geocoding step. (see Cossins, Col. 16 lines 8-31)

Additionally, Cossins teaches, the method according to claim 1, further comprising retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

Cossins fails to teach, the method according to claim 2, further comprising: validating the input address information; and selectively outputting validated address information based upon the validating step.

Additionally, Cossins fails to teach, the method according to claim 2, wherein the geocoding step comprises determining the positional information at a rooftop level in response to the validating step.

Additionally, Cossins fails to teach, the method according to claim 5, wherein the geocoding step further comprises:

determining the positional information at a ZIP-9 level in response to invalid rooftop level validation; and

alternatively determining the positional information at a ZIP-5 level in response to invalid ZIP-9 level validation.

Esposito teaches, the method according to claim 2, further comprising:
validating the input address information; and (see Esposito, Col 2 lines 51-60)
selectively outputting validated address information based upon the validating
step. (see Esposito, Col 2 lines 15-21)

Additionally, Esposito teaches, the method according to claim 2, wherein the
geocoding step comprises determining the positional information at a rooftop level in
response to the validating step. (see Esposito, Col 2 lines 51-60 "street level hit" is
equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3)

Additionally, Esposito teaches, the method according to claim 5, wherein the
geocoding step further comprises:

determining the positional information at a ZIP-9 level in response to invalid
rooftop level validation; and

alternatively determining the positional information at a ZIP-5 level in response to
invalid ZIP-9 level validation. (see Esposito, Col 2 lines 51-60 "street level hit" is
equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3)

It would have been obvious to a person of ordinary skill in the art at the time of
the invention was made to used the more accurate geocoder of Esposito with Cossins

means of generating maps because Esposito provides improved geocoding giving higher precision (see Esposito, Abstract)

41. For claim 15 and 16, Cossins teaches, a geographic information system comprising:

an application server configured to receive input address information and selection criteria corresponding to requested information; and (see Cossins Col. 15 lines 61-63)

a data source coupled to the database server, wherein the database server retrieves the requested information from the data source based upon the selection criteria and transmits the requested information to the application server, and (see Cossins Col. 15 line 64 to Col. 16 line 2)

wherein the application server selectively generates a map graphic based upon validated address and positional information from the database server. (see Cossins, Col. 16 lines 15-31)

Additionally, Cossins teaches, the geographic information system according to claim 15, wherein the application server is further configured to optionally provide map scaling information and generate the map graphic based upon the map scaling information. (see Cossins, figure 8, 10, and 38)

Cossins fails to teach, a database server communicating with the application server, the database server configured to validate and geocode the input address information, the database server outputting validated address information and positional information to the application server.

Esposito teaches, a database server communicating with the application server, the database server configured to validate and geocode the input address information, the database server outputting validated address information and positional information to the application server.

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used the more accurate geocoder of Esposito with Cossins means of generating maps because Esposito provides improved geocoding giving higher precision (see Esposito, Abstract)

42. For claims 18, 19, 21, 22, 23, and 25, Cossins teaches, a geographic information system comprising:

an application server configured to receive requested information including input address information; (see Cossins, Col. 15 lines 61-63)

a database server communicating with the application server, wherein the database server is configured to geocode the input address information; and (see Cossins, Col. 16 lines 3-7)

a data source coupled to the database server, wherein the database server is configured to retrieve the requested information based upon geocoded input address.
(see Cossins, Col. 16 lines 8-31)

Cossins fails to teaches, the system according to claim 17, wherein the application server is further configured to receive selection criteria which corresponds to the requested information, wherein the database server outputs validated address information and positional information to the application server, and wherein the database server retrieves the requested information based upon the selection criteria.

Additionally, Cossins fails to teaches, the system according to claim 18, wherein the application server selectively generates a map graphic based upon the validated address and the positional information received from the database server and based upon map scaling information received from a client station.

Additionally, Cossins fails to teaches, the system according to claim 17, wherein the database server comprises:

an address validation and geocode module configured to validate and geocode the input address information; and

a spatial information database module configured to store and retrieve spatial data associated with the requested information.

Additionally, Cossins fails to teach, the system according to claim 21, wherein the address validation and geocode module determines the positional information according to a predetermined order of precision based upon whether the input address information is valid.

Additionally, Cossins fails to teaches, the system according to claim 22, wherein the predetermined order of precision is at least one of rooftop, ZIP-9, and ZIP-5.

Additionally, Cossins fails to teaches, the system according to claim 19, wherein the application server further comprises a JAVA servlet to process the input address information, selection criteria corresponding to the requested information, and map scaling information from the client station.

Cossins in combination with Esposito teaches, the system according to claim 17, wherein the application server is further configured to receive selection criteria which corresponds to the requested information, wherein the database server outputs validated address information and positional information to the application server, and wherein the database server retrieves the requested information based upon the selection criteria. (see Cossins, Col. 16 lines 8-31 and see Esposito, lines Col. 2 lines 15-21)

Additionally, Cossins in combination with Esposito teaches, the system according to claim 18, wherein the application server selectively generates a map graphic based upon the validated address and the positional information received from the database server and based upon map scaling information received from a client station. (see Cossins Col. 16 lines 8-31 and see Esposito lines Col. 2 lines 15-21)

Additionally, Cossins in combination with Esposito teaches, the system according to claim 17, wherein the database server comprises:

an address validation and geocode module configured to validate and geocode the input address information; and (see Esposito lines Col. 2 lines 15-21)

a spatial information database module configured to store and retrieve spatial data associated with the requested information. (see Cossins Col. 16 lines 8-31)

Additionally, Cossins in combination with Esposito teaches, the system according to claim 21, wherein the address validation and geocode module determines the positional information according to a predetermined order of precision based upon whether the input address information is valid. (see Esposito lines Col. 1 line 65 to Col. 2 line 4 and Col. 2 lines 15-21)

Additionally, Cossins in combination with Esposito teaches, the system according to claim 22, wherein the predetermined order of precision is at least one of rooftop, ZIP-9, and ZIP-5. (see Esposito lines Col. 1 line 65 to Col. 2 line 4 and Col. 2 lines 15-21)

Additionally, Cossins in combination with Esposito teaches, the system according to claim 19, wherein the application server further comprises a JAVA servlet to process the input address information, selection criteria corresponding to the requested information, and map scaling information from the client station. (see Cossins Col. 7 lines 53-65)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used the more accurate geocoder of Esposito with Cossins means of generating maps because Esposito provides improved geocoding giving higher precision (see Esposito, Abstract)

43. For claim 35, 39, and 40, Cossins teaches, a computer-readable medium carrying a sequences of instructions for utilizing a geographical information system, the sequences of instructions including instructions which, when executed by a processor, cause the processor to perform the steps of:

receiving input address information; (see Cossins, Col. 15 lines 61-63)

geocoding the input address information to generate positional information; and
(see Cossins, Col. 16 lines 5-7)

retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

Cossins fails to teaches, the computer-readable medium according to claim 33, wherein the processor further performs the step of:

validating the input address information; and
selectively outputting validated address information based upon the validating step.

Additionally, Cossins fails to teaches, the computer-readable medium according to claim 35, wherein the geocoding step comprises determining the positional information at a rooftop level in response to the validating step.

Additionally, Cossins fails to teaches, the computer-readable medium according to claim 39, wherein the geocoding step further comprises:

determining the positional information at a ZIP-9 level in response to invalid rooftop level validation; and
alternatively determining the positional information at a ZIP-5 level in response to invalid ZIP-9 level validation.

Esposito teaches, the computer-readable medium according to claim 33, wherein the processor further performs the step of:

validating the input address information; and (see Esposito, Col 2 lines 51-60)

selectively outputting validated address information based upon the validating step. (see Esposito, Col 2 lines 15-21 and Col. 5 lines 60-64)

Additionally, Esposito teaches, the computer-readable medium according to claim 35, wherein the geocoding step comprises determining the positional information at a rooftop level in response to the validating step. (see Esposito, Col 2 lines 51-60 “street level hit” is equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3 and Col. 5 lines 60-64)

Additionally, Esposito teaches, the computer-readable medium according to claim 39, wherein the geocoding step further comprises:

determining the positional information at a ZIP-9 level in response to invalid rooftop level validation; and

alternatively determining the positional information at a ZIP-5 level in response to invalid ZIP-9 level validation. (see Esposito, Col 2 lines 51-60 “street level hit” is equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3 and Col. 5 lines 60-64)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used the more accurate geocoder of Esposito with Cossins means of generating maps because Esposito provides improved geocoding giving higher precision (see Esposito, Abstract)

44. For claim 44, 47 and 48, Cossins teaches, a method of determining service availability using a geographical information system, the method comprising:

providing address information and a selection criterion; (see Cossins, Col. 15 lines 61-63)

retrieving requested information based upon the address information and the selection criterion, the retrieving step comprising,

geocoding the address information, and (see Cossins, Col. 16 lines 5-7)
outputting positional information. (see Cossins, Col. 16 lines 8-31)

Additionally, Cossins fails to teaches, the method according to claim 43, further comprising:

validating the address information; and
selectively outputting validated address information based upon the validating step.

Additionally, Cossins fails to teach, the method according to claim 43, wherein the geocoding step comprises determining the positional information at a rooftop level in response to the validating step.

Additionally, Cossins fails to teaches, the method according to claim 47, wherein the geocoding step further comprises: determining the positional information at a ZIP-9 level in response to invalid rooftop level validation;

and alternatively determining the positional information at a ZIP-5 level in response to invalid ZIP-9 level validation.

Esposito teaches, the method according to claim 43, further comprising:
validating the address information; and (see Esposito, Col 2 lines 51-60)
selectively outputting validated address information based upon the validating step. (see Esposito, Col 2 lines 15-21)

Additionally, Esposito teaches, the method according to claim 43, wherein the geocoding step comprises determining the positional information at a rooftop level in response to the validating step. (see Esposito, Col 2 lines 51-60 "street level hit" is equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3)

Additionally, Esposito teaches, the method according to claim 47, wherein the geocoding step further comprises: determining the positional information at a ZIP-9 level in response to invalid rooftop level validation;

and alternatively determining the positional information at a ZIP-5 level in response to invalid ZIP-9 level validation. (see Esposito, Col 2 lines 51-60 "street level hit" is equivalent to rooftop level and Col. 1 line 65 to Col. 2 line 3)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used the more accurate geocoder of Esposito with Cossins

means of generating maps because Esposito provides improved geocoding giving higher precision (see Esposito, Abstract)

45. Claims 9, 20 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cossins (U.S. Patent 6,343,290) in combination with Hildebrant et al. (for the rest of the office action referenced to as Hildebrant.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

46. For claim 9, Cossins teaches, a method of utilizing a geographical information system, the method comprising:

receiving input address information; (see Cossins, Col. 15 lines 61-63)

geocoding the input address information; (see Cossins, Col. 16 lines 5-7)

and outputting positional information in response to the geocoding step. (see Cossins, Col. 16 lines 8-31)

Additionally, Cossins teaches, the method according to claim 1, further comprising retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

Cossins fails to teach, the method according to claim 2, further comprising interfacing with an applications client via a CORBA (Common Object Request Broker Architecture) object request broker (ORB).

Hildebrandt teaches, the method according to claim 2, further comprising interfacing with an applications client via a CORBA (Common Object Request Broker Architecture) object request broker (ORB). (see Hildebrandt, abstract, also an ORB is inherent in a CORBA system)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used Hildebrandt communication method with Cossins means of generating maps because it provides for compliance with the GIXS standard. (see Hildebrandt, paragraph 3.2)

47. For claim 20, Cossins teaches, a geographic information system comprising:
an application server configured to receive requested information including input address information; (see Cossins, Col. 15 lines 61-63)

Art Unit: 2143

a database server communicating with the application server, wherein the database server is configured to geocode the input address information; and (see Cossins, Col. 16 lines 3-7)

a data source coupled to the database server, wherein the database server is configured to retrieve the requested information based upon geocoded input address. (see Cossins, Col. 16 lines 8-31)

Cossins fails to teach, the system according to claim 17, wherein the database server comprises a CORBA (Common Object Request Broker Architecture) object request broker (ORB) to interface with an applications client.

Hildebrandt teaches, the system according to claim 17, wherein the database server comprises a CORBA (Common Object Request Broker Architecture) object request broker (ORB) to interface with an applications client. (see Hildebrandt, abstract, also an ORB is inherent in a CORBA system)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used Hildebrandt communication method with Cossins means of generating maps because it provides for compliance with the GIXS standard. (see Hildebrandt, paragraph 3.2)

48. For claim 38, Cossins teaches, a computer-readable medium carrying a sequences of instructions for utilizing a geographical information system, the sequences of instructions including instructions which, when executed by a processor, cause the processor to perform the steps of:

receiving input address information; (see Cossins, Col. 15 lines 61-63)
geocoding the input address information to generate positional information; and (see Cossins, Col. 16 lines 5-7)
retrieving requested information based upon the positional information. (see Cossins, Col. 16 lines 14-20)

Cossins fails to teach, the computer-readable medium according to claim 33, wherein the processor further performs the steps of: interfacing with an applications client via a CORBA (Common Object Request Broker Architecture) object request broker (ORB).

Hildebrandt teaches, the computer-readable medium according to claim 33, wherein the processor further performs the steps of: interfacing with an applications client via a CORBA (Common Object Request Broker Architecture) object request broker (ORB).
(see Hildebrandt, abstract, also an ORB is inherent in a CORBA system)

It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used Hildebrandt communication method with Cossins means of generating maps because it provides for compliance with the GIXS standard. (see Hildebrandt, paragraph 3.2)

49. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cossins (U.S. Patent 6,343,290) in combination with Bruce Brown (PC Magazine October 25, 1994).

50. For claim 30, Cossins teaches, a geographic information system comprising:
an application server configured to receive requested information including input address information; (see Cossins, Col. 15 lines 61-63)
a database server communicating with the application server, wherein the database server is configured to geocode the input address information; and (see Cossins, Col. 16 lines 3-7)
a data source coupled to the database server, wherein the database server is configured to retrieve the requested information based upon geocoded input address.
(see Cossins, Col. 16 lines 8-31)

Additionally, Cossins teaches, the system according to claim 17, wherein the application server supports a graphical user interface (GUI) on a client station, the application server

Cossins fails to teaches, providing a user with a plurality of push-pin icons for use in determining distance calculation representative of positions of the push-pin icons on a map graphic.

Art Unit: 2143

Bruce Brown shows, providing a user with a plurality of push-pin icons for use in determining distance calculation representative of positions of the push-pin icons on a map graphic. (see Bruce Brown, Finding An Address, and see figure p56)


It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to used pushpin icon shown by Bruce Brown and method with Cossins means of generating maps because it allows you to track the progress on the map. (see Bruce Brown, figure and caption, p56)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M Bhatia whose telephone number is 703-605-4344. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB


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